Abræus cohæres, sp. n.

A. bonzico similis, sed multo minor, fronte leviter impressa; metasterno haud canaliculato.

L. $1\frac{3}{4}$ mill.

Circular in outline, convex, black and somewhat opaque, densely punctate, with short slightly club-shaped setæ; the head densely and coarsely punctured, with a feeble median frontal impression; the thorax and elytra are similarly punctate, except that the thorax has large punctures along the basal edge, and the elytra for the posterior half are longitudinally rugose; the propygidium is punctured like the disk of the thorax, but the punctuation of the pygidium is smaller, more even and clear; the prosternum and mesosternum are somewhat irregularly punctured, the punctures varying in size; the metasternum has an extremely fine longitudinal median line, and the punctures on the surface are more closely set than those of the mesosternum; along the anterior edge of the first abdominal segment is a row of large punctures.

This species resembles *A. bonzicus*, Mars., but it is about half its size. *A. bonzicus* has a straight, shallow, but well-marked median channel down the middle of the metasternum; this character is not noticed by Marseul. It is probable both species are of stercoraceous habits, as I found *A. bonzicus* in great profusion in horse-dung at Otaru, on the west coast of Yezo, on the 4th August, 1880.

Hab. Hongkong (*J. J. Walker*). Several examples.

XXIV.—*Report on the Rules of Zoological Nomenclature to be submitted to the Fourth International Zoological Congress at Cambridge by the International Committee for Zoological Nomenclature* *.

1898.

Introduction.

This Report is "informal," in the sense that while the Committee has discussed the subject-matter herein contained, and has agreed to submit to the next International Zoological Congress the views expressed below, it has not yet had an opportunity to discuss in detail the exact arrangement of the various rules and recommendations. In its final sessions at Cambridge the Committee will

* The International Committee, which was appointed at the Leyden Meeting of the Congress in September 1895, consists of Dr. R. Blanchard of Paris, Prof. J. Victor Carus of Leipzig, Dr. F. A. Jentink of Leyden, Mr. P. L. Sclater of London, and Dr. C. W. Stiles of Washington. The English edition of the Report has been prepared by Dr. Stiles.

undoubtedly make certain changes of an editorial nature, and will naturally consider the sequence of the various articles.

In the French edition * of the proceedings Prof. Blanchard has followed as closely as possible the original sequence of the Paris-Moscow Code. Certain changes in this sequence are, however, advisable. I have thought best for the present to adopt the order suggested by Prof. Carus.

The Committee has decided to recommend to the next Congress the appointment of a Permanent International Committee of not less than seven members, whose duty it shall be to examine and report upon all propositions of nomenclature submitted to the Fifth or any succeeding International Zoological Congress.

It is the unanimous opinion of the present International Committee that no proposition for change, amendment, or addition to the International Code of Zoological Nomenclature should be allowed to come before the Fifth or any succeeding International Zoological Congress for consideration unless the said proposition shall have been in the hands of the Permanent International Committee at least one year before the date of meeting of the Congress.

Any person receiving copies of this Report, and desiring to express any opinion, favourable or otherwise, upon any principle contained therein, is invited to communicate personally by letter with any member of the Committee. The Members of the Committee cannot, however, at present enter into any public discussion in the scientific journals.

C. W. Stiles †.

A.—RULES.

I. General Propositions in Zoological Nomenclature.

1.

Zoological nomenclature is binomial. Every animal (living and fossil) is designated by a generic name followed by a specific name.

Example: *Corvus corax*.

These names must be either Latin or Latinized, or considered or treated as such, in case they are not of Latin origin.

2.

In certain cases, where it is desirable to distinguish subspecies or varieties, this may be done in the manner hereinafter provided.

3.

Zoological nomenclature is independent of botanical nomenclature. (At the same time it is well to avoid the introduction into Zoology as generic names of such names as are already in use in Botany.)

* Bull. Soc. Zool. France, 1897, pp. 173–185.

† Present address: United States Embassy, Berlin, Germany.

4.

A generic name is to be rejected when it has previously been used for some other genus of animals.

5.

A specific name is to be rejected when it has previously been used for some other species or subspecies of the same genus.

6.

Rejected homonyms * can never again be used. Rejected synonyms * can never again be used except in cases of the restoration of erroneously suppressed groups.

Examples: *Tænia Giardi*, Moniez, 1879, was suppressed as a synonym of *T. ovilla*, Rivolta, 1878; later on it was discovered that *T. ovilla* was preoccupied (*T. ovilla*, Gmelin, 1790). *T. ovilla*, 1878, is suppressed as a homonym, and can never again be used; it was superfluous, and cannot be employed, even if the species is placed in another genus (*Thysanosoma*). *T. Giardi*, 1879, which was suppressed as a synonym, becomes valid upon the suppression of the homonym *T. ovilla*.

7.

A name once published cannot be rejected even by its author because of inapplicability.

8.

Majority (Blanchard, Carus, Sclater):

All grammatical errors must be corrected; at the same time hybrid names are to be retained without emendation.

Examples: correct *Cuterebra* to *Cutiterebra*, *Glossiphonia* to *Glossosiphonia*, but do not change *Vermipsylla* to *Helminthopsylla*.

Minority (Jentink, Stiles):

Barbarisms and solecisms shall be construed (under B. 35 *k*) as arbitrary combinations of letters, and cannot be rejected or emended because of faulty construction. Hybrid names are to be avoided, but when once published are not to be rejected.

II. Generic and Subgeneric Names.

9.

A generic name must consist of a single word, preferably a noun, simple or compound, but always written as one word in the nominative singular (see Rule 1).

* A homonym is one and the same name for two or more different things. A synonym is one of two or more different names for one and the same thing. In the example given, *T. ovilla*, 1878, and *T. ovilla*, 1790, are homonyms, while *T. ovilla*, 1878, and *T. Giardi*, 1879, are synonyms. Rule 6 is simply a more detailed wording of the poorly expressed and too often misinterpreted "Once a synonym, always a synonym." "Once a homonym, always a synonym," is correct, but "Once a synonym, always a synonym," is inexact.—C. W. S.

10.

Generic and subgeneric names are subject to the same rules and recommendations, and from a nomenclatural standpoint they are coordinate.

III. Specific Names.

11.

Specific names, whether substantives or adjectives, must in every case be uninominal. This does not, however, exclude the use of compound proper names indicating dedication or compound words indicating a comparison; such words are written as one word with or without the hyphen.

Examples: *Sanctæ-Catharinæ*, *Jan-Mayeni*, *cornu-pastoris*, *coranguinum*, *cedo-nulli*.

12.

Specific names are of three kinds:—

a. Adjectives which must agree grammatically with the generic name.

Examples: *Carabus auratus*, *Felis marmorata*, *Emys Belliana*.

b. Substantives in the nominative in apposition with the generic name.

Examples: *Felis leo*, *Sphinx elpenor*.

c. Substantives in the genitive, such as those given in dedication to persons or groups of persons.

The genitive is formed by adding an *i* to the exact name of the person if a man, an *æ* in case the person is a woman. In case the name in question is one which was employed and declined in Latin, it follows the rules of declination. It is placed in the plural when the dedication is made to a group of persons.

13.

Majority (Blanchard, Jentink, Stiles):

While it is desirable to avoid the repetition of the generic name as a specific name (*Perdix perdix*, *Trutta trutta*), such repetition is not sufficient grounds for rejecting or changing either the generic or the specific name. The same principle applies to the repetition of the specific name as subspecific or varietal name (*Amblystoma Jeffersonianum Jeffersonianum*).

Minority (Carus, Sclater):

Specific names, when used as generic, must be changed.

14.

Specific and subspecific names are subject to the same rules and recommendations, and from a nomenclatural standpoint they are coordinate.

IV. The Manner of Writing Generic and Specific Names.

15.

Generic and subgeneric names are to be written with a capital initial letter.

16.

While specific names derived from persons may be written with a capital initial letter, all other specific names are to be written with a small initial letter.

Examples: *Rhizostoma Cuvieri, Francolinus Lucani, Œstrus bovis.*

17.

Majority report (Blanchard, Jentink, Sclater):

The author of a species shall be that person who

a. First describes and names the species in conformity with Rule 1.

b. Names a described but unnamed species.

c. Substitutes a name given according to Rule 1 in place of one given contrary to that article.

d. Suppresses a preoccupied name and substitutes a new name in its place.

The name of the author of the species is written in the same type as the text and immediately after the specific name, without the interposition of a comma; if the text is Roman, the generic and specific names are placed in italics; if the text is italics, the binominal is placed in Roman.

Minority report (Carus, Stiles):

a. The author of a species or other group is the author of the name of that species or group.

b. The author of the name of a species or other group is he who first published that name in a recognizable manner—except that where the publishing author has had access to the manuscript statements of another author, as in a posthumous work or a borrowed manuscript, the authority which he gives for the name shall be considered correct and accepted, unless it shall be proved afterwards to be incorrect. In this case it shall be considered that the writer of the manuscript publishes the name in the article of the author that quotes him.

c=*b*
d=*c*
e=*d* } of the Majority.

f. The authority for the specific or other name is written after that name, and is not separated from it by any mark of punctuation, except—

1. In cases of specific names which are transferred to another than the original genus, or combined with another than the original generic name with which they

were first published, the author of the specific name is to be placed in parentheses.

2. Where a genus is reduced to subgeneric rank, or a subgenus is raised to generic rank, the name of the author of the name is to be enclosed in parentheses.

18.

When it is desirable to cite the name of a subgenus, this name is to be placed in parentheses between the name of the genus and that of the species.

Example: *Vanessa* (*Pyrameis*) *cardui* Linné.

19.

a. If it is desired to cite the name of a variety or subspecies, such name is written immediately following the specific name.

b. The citation of a variety or subspecies in binominal form (as *Corvus kamtschaticus* instead of *C. corax kamtschaticus*) is not permitted (see Rule 33). The introduction of the words "varietas" or "subspecies" or their abbreviations "var." or "subsp." is therefore not necessary.

Examples: *Rana esculenta marmorata* Haliwell, but not *Corax kamtschaticus* instead of *Corvus corax kamtschaticus*. On hybrids see Rule 34.

V. Subdivision and Union of Genera and Species.

20.

When a genus is divided into two or more restricted genera, the original name must be retained for one of the restricted genera; if a type species has been proposed, the division containing that species must retain the (otherwise valid) generic name.

The name of the typical subgenus must be the same as the name of the genus.

21.

If the original type of the genus is not clearly indicated, the author who first subdivides the genus may apply the original generic name to such restricted genus as he may judge advisable, and such assignment is not subject to subsequent modification.

In no case, however, can the original name be transferred to a group containing none of the species originally included in the genus or which the author of the original genus doubtfully referred to it.

22.

The division of a species into two or more restricted species is subject to the same rules as the division of a genus. But a specific name which undoubtedly rests upon an error of identification cannot be retained, even when the species are afterwards placed in different genera.

Example: *Tænia pectinata* Goeze, 1782 = *Cittotænia pectinata* (Goeze) Raill., while "*Tænia pectinata* Goeze" von Zeder, 1800 = *Andrya rhopalocephala* (Riehm). *Andrya pectinata* (Zeder) could not be admitted.

23.

When a species is divided, the restricted species to which the original specific name of the primitive species is attributed may receive a notation indicating both the name of the original author and the name of the reviser.

Example: *Tænia pectinata* Goeze partim, Riehm.

By application of Rule 22 both the name of the original author and of the reviser are placed in parentheses if the species is transferred to another genus.

Example: *Monieza pectinata* (Goeze partim, Riehm) Blanchard.

24.

A genus formed by the union of several genera takes the oldest valid generic or subgeneric name of its components. If the names are all of the same date, that selected by the first reviser shall be retained.

25.

The same rule is applicable when several species or subspecies are united to form a single species.

26.

When, in consequence of the union of two genera, two different animals having the same specific or subspecific name are brought into one genus, the more recent specific or subspecific name falls as a synonym.

VI. Family and Subfamily Names.

27.

The name of a family is formed by adding the ending *idæ*, the name of a subfamily by adding *inæ*, to the root of the name of its type genus.

28.

The name of a family or subfamily should be changed when the generic name serving as a type is changed.

VII. The Law of Priority.

29.

The name of a genus or species can only be that name under which it was first designated, on the condition:

a. That this name was published and clearly defined or indicated.

b. That the author has properly adopted the principles of binominal nomenclature.

30.

The tenth edition of the 'Systema Naturæ,' 1758, is the date of the consistent general application in Zoology of the binary system of nomenclature. This date therefore is accepted as the starting-point of zoological nomenclature and of the operation of the Law of Priority.

31.

The Law of Priority obtains, and consequently the oldest available name is retained, even :

a. When any part of an animal is named before the animal itself, as, for example, in the case of fossils.

b. When the larva is named before the adult.

(Exception must be made, at least for the present, in the case of the cestodes, trematodes, nematodes, acanthocephali, and acarines—in a word, for animals which submit to a metamorphosis and change of host ; otherwise many of these would have to submit to a nomenclatural revision, which would be only temporary in character and lead to deep confusion, the final result and extent of which it is now impossible to foresee.)

c. When the two sexes of a species have been considered as distinct species or as belonging to distinct genera.

d. When an animal presents a regular succession of dissimilar generations which have been considered as belonging to different species, or even to different genera.

32.

When several genera or species have been proposed simultaneously, so that it is impossible to establish priority, preference is to be decided as follows :—

a. A generic name accompanied by specification of a type has precedence over a name without such specification. If all or none of the genera have types indicated, that generic name takes precedence the diagnosis of which is most pertinent.

b. A specific name accompanied by both description and figure shall stand in preference to one accompanied only by a diagnosis or only by a figure.

c. Other things being equal, the name is to be preferred which stands first in the book or article (Page-precedence *).

d. **But in all cases** the name adopted by the first reviser of the group shall stand, even if such adoption is contrary to these conditions.

B.—RECOMMENDATIONS.

33.

When the word *varietas* is interposed between the specific and

* The expression "Page-priority" contains a contradiction.—C. W. S.

varietal names, the varietal name, if adjectival, agrees with it grammatically.

Example: *Corvus corax* var. *kamtschatica.*

If the word *varietas* is not used, the varietal name agrees grammatically with the generic name.

Example: *Corvus corax kamtschaticus.*

34.

a. In the notation of hybrids the name of the male parent precedes that of the female parent, and is united to it by the sign of multiplication (×). The use of the sexual signs is not necessary.

Examples: *Capra hircus* × *Ovis aries*, or *Capra hircus* ♂ × *Ovis aries* ♀.

b. Hybrids may also be cited in form of a fraction, the male parent forming the numerator and the female parent the denominator.

Example: $\frac{\textit{Capra hircus}}{\textit{Ovis aries}}$.

The fractional form is better, in that it permits the citation of the observer when this is desirable, also in case one of the parents is a hybrid.

Examples:

$$\frac{\textit{Branta canadensis}}{\textit{Cygnopsis cygnoides}}, \quad \& \quad \frac{\textit{Tetrao tetrix} \times \textit{Tetrao urogallus}}{\textit{Gallus gallinaceus}}.$$

In the latter case, however, parentheses may be used.

Example: (*Tetrao tetrix* × *Tetrao urogallus*) × *Gallus gallinaceus.*

c. When the parents of a supposed hybrid are not definitely known, the latter takes provisionally a specific name, the same as if it were a true species; but the generic name may be preceded by the sign of multiplication.

Example: × *Helminthophila leucobronchialis.*

35.

The following words may be taken as generic names:—

a. Greek substantives, for which the rules of Latin transcription should be followed.

Example: *Ancylus*, *Amphibola*, *Pompholyx*, *Cylichna.*

The transcription should be made according to the following list:—

$\epsilon = e$ (ὑαλέος)	*Hyalea*, not *Hylæa.*
$\eta = e$ (πειρήνη)	*Pirena*, not *Pirina.*
Final $\eta = a$ (πειρήνη)	*Pirena*, not *Pirine.*
$\theta = th$ (τηθύς)	*Tethys*; στῆθος—*stethus*, not *sthetus.*
$\iota = i$ (βαλιός)	*Balia*, not *Balea.*

$\kappa = c$ ($\text{ἱππο}\kappa\rho\acute{\eta}\nu\eta$)	*Hippocrena*, not *Hippochrenes*.
$\xi = x$ ($\xi\acute{\epsilon}\nu\text{os}$)	*Xenus*, *Xenophora*.
$\rho = r$ ($\pi\tau\epsilon\rho\acute{o}\nu$)	*Pterum*.
$\upsilon = y$ ($\acute{\upsilon}\beta\acute{\text{o}}\text{s}$)	*Hybolithus*, not *Hibolithus*.
$\alpha\iota = \text{æ}$ ($\lambda\iota\mu\nu\alpha\tilde{\iota}\text{os}$)	*Limnæa*, not *Limnea*.
$\alpha\upsilon = au$ ($\gamma\lambda\alpha\upsilon\chi\acute{\text{o}}\text{s}$)	*Glaucus*.
$\epsilon\iota = \text{i}$ ($\chi\epsilon\tilde{\iota}\lambda\text{os}$)	*Chilostoma*, not *Cheilostoma*.
$\epsilon\upsilon = eu$ ($\epsilon\tilde{\upsilon}\rho\text{os}$)	*Eurus*.
φ, $\text{o}\iota = \text{œ}$ ($\text{o}\iota\text{κ}\acute{\epsilon}\omega$)	*Dioœca*, *Dendrœca*, not *Dioica*, *Dendroica*.
Final $\text{o}\nu = um$ ($\grave{\epsilon}\phi\acute{\iota}\pi\pi\iota\text{o}\nu$)..	*Ephippium*, not *Ephippion*.
Final $\text{o}\text{s} = us$ ($\grave{\text{o}}\mu\phi\alpha\lambda\acute{\text{o}}\text{s}$) ..	*Euomphalus*, not *Euomphalos*.
$\text{o}\upsilon = u$ ($\lambda\text{o}\upsilon\tau\acute{\eta}\rho\iota\text{o}\nu$).....	*Luterium*, not *Lotorium*.
$\gamma\gamma = ng$ ($\grave{\alpha}\gamma\gamma\alpha\rho\epsilon\acute{\iota}\alpha$)	*Angaria*.
$\gamma\chi = nch$ ($\grave{\alpha}\gamma\chi\acute{\iota}\text{στ}\text{o}\mu\text{o}\nu$)....	*Anchistoma*, not *Angistoma*.
$\gamma\kappa = nc$ ($\check{\alpha}\gamma\kappa\iota\text{στ}\rho\text{o}\nu$)	*Ancistrodon*, not *Agkistrodon*.
$\acute{\rho} = rh$ ($\acute{\rho}\eta\alpha$)	*Rhea*.
$' = h$ ($\grave{\epsilon}\rho\mu\alpha\tilde{\iota}\alpha$)	*Hermæa*, not *Ermæa*.

b. Compound Greek words, in which the attribute should precede the principal word.

Examples: *Stenogyra*, *Pleurobranchus*, *Tylodina*, *Cyclostomum*, *Sarcocystis*, *Pelodytes*, *Hydrophilus*, *Rhizobius*.

Words formed like *Hippopotamus*, *Philhydrus*, *Biorhiza*, in which the attribute follows the principal word, are to be avoided.

c. Latin substantives; adjectives and past participles are not recommended.

Examples: *Ancilla*, *Auricula*, *Cassis*, *Conus*, *Dolium*, &c.

d. Compound Latin words.

Examples: *Stiliger*, *Dolabrifer*, *Semifusus*.

e. Greek or Latin derivatives expressing diminution, comparison, resemblance, or possession.

Examples: *Lingularius*, *Lingulina*, *Lingulinopsis*, *Lingulella*, *Lingulepis*, *Lingulops*, all derived from *Lingula*.

f. Mythological or heroic names; if not Latin these should be given a Latin termination.

Examples: *Osiris*, *Venus*, *Brisinga*, *Velleda*, *Crimora*; *Ægirus*, *Gondulia*.

g. Names used by the ancients.

Examples: *Cleopatra*, *Belisarius*, *Melania*.

h. Modern family names, to which is added an ending to denote dedication. In using such names the following principles should be observed:—

α. Family names taken from the Latin or Germanic tongues, or from languages in which the Latin alphabet is used, retain their exact original spelling including diacritic marks.

Examples: *Selysius*, *Lamarckia*, *Köllikeria*, *Mülleria*, *Stâlia*, *Kröyeria*, *Ibañezia*.

β. Names terminating with a consonant take the ending *ius*, *ia*, or *ium*.

γ. Names terminating with the vowels *e*, *i* *o*, *u*, *y*, take the ending *us*, *a*, or *um*. Names terminating with *a* take *ia*.

Examples: *Blainvillea*, *Cavolinia*, *Futiva*, *Bernaya*, *Poeya*; *Danaia*.

δ. In cases of patronymics consisting of two words only one of these is used in the formation of a generic name.

Examples: *Selysius*, *Targionia*, *Duthiersia*.

ε. In generic names formed from patronymics the particles are omitted if not coalesced with the name; the articles, however, are retained.

Examples: *Selysius*, *Blainvillea*, *Lacazia*, *Lacepedea*, *Benedenia*, *Chiajea*; *Dumerilia*.

ζ. The use of proper names (*f*, *g*, *h*, *i*) in the formation of compound generic names is objectionable.

Names like *Eugrimmia*, *Buchiceras*, *Pseudograteloupia*, *Mobiusisporgia*, are to be avoided.

i. Names of ships, which should be treated the same as mythological names or as modern patronymics.

Examples: *Blakea*, *Hirondellea*, *Challengeria*.

j. Barbarous names, *i. e.* words of non-classical origin; these names should have a Latin termination.

Examples: *Vanikoro*, *Agouti*, *Chilosa*, *Fossarus*, *Vetus*.

k. Words formed by arbitrary combinations of letters or by anagram; these should also be given a Latin termination. It is desirable that recourse to arbitrary combinations and to anagrams should be used as little as possible.

Examples: *Dacelo*, *Verlusia*, *Linospa*.

36.

a. The best specific name is a Latin adjective, short, euphonious, and of easy pronunciation. Latinized Greek words and indeclinable barbarous words may, however, be used.

b. The prefixes *sub* and *pseudo* should be used only with adjectives and substantives—*sub* with Latin words, *pseudo* with Greek words. They should not be used in combination with proper names (*sub-wilsoni* &c.); but if such words are once introduced, they are not subject to emendation.

c. The terminations *oides* and *ides* should be used in combination only with Greek or Latin substantives. They should not be used in combination with proper names; but if once so used are not subject to emendation.

d. If a specific name is a geographical name it should be placed in the genitival or adjectival form, if it was known to the Romans or Latinized by the writers of the middle ages. If adjectival it is written with a small initial letter.

e. All other geographical names should be changed into adjectives, following the rules of Latin derivation, and should retain the exact spelling (including diacritic marks) of the radical, if this latter has not been used in Latin; names of islands, however, which are derived from names of persons, may preserve their substantive form, but are then to be placed in the genitive.

f. (Blanchard, Jentink):

If from the radical of a geographical name two adjectives are derived (*hispanus* and *hispanicus*), they cannot be used as specific names in the same genus.

f. (Carus, Stiles):

If from the radical of a geographical name two adjectives are derived (*hispanus* and *hispanicus*, *moluccensis* and *molluccanus*), it is not advisable to use both as specific names in the same genus, but such use of names is not sufficient reason for rejecting either of them.

g. Geographical and other proper names of countries which have no recognized orthography or which do not use the Latin alphabet should be transcribed into Latin according to the rules adopted by the Geographical Society of Paris.

Examples: *Bogdanovi*, *Metshnikovi*.

37.

a. In case of words of identical etymology, differing only in spelling but not in form, the later name is to be considered a homonym of the earlier.

Examples: *silvestris* and *sylvestris*, *cæruleus* and *cæruleus*, *Linnei* and *Linnæi*, *Rhopalophorus* and *Ropalophorus*.

b. Blanchard and Jentink favour:

1. If from the radical of a common name two or more adjectives are formed, these cannot be used as specific names in the same genus.

   Examples: *fluvialis*, *fluviatilis*, *fluviaticus*, *fluviorum*.

2. Words distinguished only by the masculine, feminine, and neuter endings are to be considered as homonyms.

b. Carus and Stiles favour:

Words of the same etymology, differing in form or gender, are not to be changed or rejected on this account.

Examples: *fluvialis*, *fluviatilis*, *fluviaticus*, and *fluviorum*; *Distomus*, *Distoma*, *Distomum*.

c. In case of words of different etymology, but identical in form and spelling, the later name is to be considered a homonym of the earlier.

Examples: *Abeona* Girard, 1854, and *Abeona* Stâl, 1876.

d. But words of different etymology, differing from each other even in a single letter, are to be retained.

Examples: *Macrodon* and *Microdon*; *Tænia furcigera* and *Tænia furcifera.*

e. Similar generic names are not to be rejected when they are not absolutely identical if correctly spelled.

38.

When the name of the author of a species or other group is abbreviated, the writer will do well to conform to the list of abbreviations proposed by the Zoological Museum of Berlin, adopted and enlarged by the Paris Congress.

39.

In selecting a type authors should govern themselves by the following:—

1. A genus which contains a species bearing the same name, either as a valid name or a synonym, takes that species as its type.

2. To select as type some species which the original author studied, unless it can be definitely shown that he had some other species more particularly in mind.

3. (If the genus has already been divided by former authors, without the specification of types, the only available method of fixing the original name to some part of the genus to which it was originally applied is, of course, by the process of elimination; but)

If the genus contains both exotic and non-exotic species, from the standpoint of the original author, the process of elimination is to be restricted to the non-exotic species.

4. To select as the type the species which is best described, or best figured, or best known.

40.

It is very desirable that the original description of any group should be accompanied by a diagnosis both individual and differential, and written either in Latin, French, German, English, or Italian. This diagnosis should also state in what museum the type specimen has been deposited.

41.

In works not published in any of these five languages it is desirable that the explanation of the figures and an abstract of the article be translated into one of these tongues.

42.

Authors are urged to use only the metric system of weights and measures and the centigrade thermometer of Celsius.

43.

The indication of enlargement or of reduction, which is necessary to the comprehension of an illustration, should be expressed in figures rather than by mentioning the system of lenses used.

44.

It is useful to indicate whether the enlargement is linear, or of the surface, or of the mass. This may be easily expressed as follows:—$\times 50^1$ indicates a linear enlargement of 50 times, $\times 50^2$ an enlargement of the surface, and $\times 50^3$ an enlargement of the mass.

BIBLIOGRAPHICAL NOTICE.

Rhopalocera Exotica; being Illustrations of New, Rare, and Unfigured Species of Butterflies. By H. Grose-Smith and W. F. Kirby. Vol. II. London: Gurney and Jackson, 1892–97.

The second volume of this well-known work should have received notice at our hands before now; but, as sometimes happens in the case of a serial publication still in course of issue, the fact of the volume's completion was overlooked.

Unduly retarded, however, as our notice has been, the authors may rest assured that there is no lack of appreciation on our part of the manner in which the high standard of their work has been maintained. As they mention in their preface, nearly 250 species are figured in this volume, the figures occupying sixty quarto plates, and representing not only both upper and under sides, but in a large number of cases both sexes of each species. The colouring throughout is excellent, but the drawing of a few of the smaller figures is somewhat unequal in quality. It will be admitted, however, that the best executed figures in point of drawing are those representing Oriental Lycænidæ (of the extremely beautiful genera *Thysonotis*, *Waigeum*, &c.), which for accuracy as well as for artistic merit are admirable; they are the work of Mr. Horace Knight.

Butterflies of all families except the Hesperiidæ find illustration in this volume: but in the number of species described and figured the Lycænidæ (109) far exceed the other groups. Next come the